



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/528,736 | 09/19/2005 | Johan Nilsson | P16235US2 | 6963 |

27045 7590 01/16/2007
ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

| |
|----------|
| EXAMINER |
|----------|

PHU, SANH D

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2618

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 01/16/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/528,736 | Applicant(s) NILSSON ET AL. | |
| | Examiner Sanh D. Phu | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11, 12, 14, 15, 17, 18 and 20 is/are rejected.
- 7) ☒ Claim(s) 4-10, 13, 16 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/22/2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because of following reasons:

In figures 1 and 4, functional blocks should be labeled with corresponding functional names. For instance, in figure 1, block (12) is suggested to be labeled with --Transceiver--, block (14) with --processor--, etc.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 4-11, 14, 17 and 20 are objected to under 37 CFR 1.75(c) as being in improper form in multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claims 4-11, 14, 17 and 20 are not been further treated on the merits.

Claim Rejections – 35 USC § 102/103

3. Claims 1-3, 11, 12, 14, 15, 17, 18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Dahlman et al (6,173,162), provided in the IDS filed on 3/22/05, or under 35 U.S.C. 103(a), as unpatentable over Dahlman et al.

–Regarding to claim 1, Dahlman et al discloses a method of power control in a mobile telecommunications network, the method (see figure 4) carried out in a mobile station for controlling transmit power of a base station, the method comprising:

procedures (28) of calculating a signal strength reference value (SIR) for each of a plurality of channels (PDCH1, PDCH2) in use (the signal strength reference being indicated via measure BER or FER of received signals obtained based on a previously calculated value for that channel in a power control loop); and maintaining the calculated signal strength reference value for a channel at or above a predetermined minimum signal strength reference value (SIR_{req}) (see col. 1, line 66 to col. 2, line 55, col. 5, line 61 to col. 6, line 25, col. 7, line 57 to col. 8, line 7).

Further in Dahlman et al, it is inherent that or would be obvious for a person skilled in the art that that the invention would be implemented in such a way that a composite reference signal strength value (SIR) (see Dahlman et al, col. 2, lines 35–40) indicated via the “mean power” of a composite signal for all of said plurality of channels received at the mobile station must be greater than

the calculated signal strength reference values for the plurality of channels otherwise the mobile station would never physically obtain the reference signal strength value (SIR) for each of the plurality channel, as desired.

With such the implementation, Dahlman et al teaches procedure of determining a signal strength reference value to be used for all of said plurality of channels in use, as the highest of all of the calculated signal strength reference values, as claimed.

–Regarding to claim 2, as applied to claim 1, Dahlman et al teaches that the signal strength reference value for a channel is a Signal-to-Interference Ratio (SIR) reference value.

–Regarding to claim 3, Dahlman et al teaches procedure of incrementally increasing or decreasing the signal strength reference value dependent upon a quality criteria check (see Dahlman et al, col. 2, lines 45–55).

–Regarding to claim 11, Dahlman et al discloses that the mobile telecommunications network uses CDMA (considered here equivalent with the limitation “WCDMA”) (see col. 1, lines 9–20).

-Regarding to claim 12, as similarly applied to claims 1-3 and 11, set forth above and herein incorporated, Dahlman et al discloses a mobile station (see figure 4) for use in a telecommunications network, wherein the mobile station comprises means (28) for performing power control by a method (see figure 4) carried out in the mobile station for controlling transmit power of a base station, the method comprising:

procedures (28) of calculating a signal strength reference value (SIR) for each of a plurality of channels (PDCH1, PDCH2) in use (the signal strength reference being indicated via measure BER or FER of received signals obtained based on a previously calculated value for that channel in a power control loop); and maintaining the calculated signal strength reference value for a channel at or above a predetermined minimum signal strength reference value (SIR_{req}) (see col. 1, line 66 to col. 2, line 55, col. 5, line 61 to col. 6, line 25, col. 7, line 57 to col. 8, line 7).

Further in Dahlman et al, it is inherent that or would be obvious for a person skilled in the art that that the invention would be implemented in such a way that a composite reference signal strength value (SIR) (see Dahlman et al ,

col. 2, lines 35–40) indicated via the “mean power” of a composite signal for all of said plurality of channels received at the mobile station must be greater than the calculated signal strength reference values for the plurality of channels otherwise the mobile station would never physically obtain the reference signal strength value (SIR) for each of the plurality channel, as desired.

With such the implementation, Dahlman et al teaches procedure of determining a signal strength reference value to be used for all of said plurality of channels in use, as the highest of all of the calculated signal strength reference values, as claimed.

–Claim 14 is rejected with similar reasons set forth for claim 11.

–Regarding to claim 15, as similarly applied to claims 1–3 and 11, set forth above and herein incorporated, discloses a base station (see figure 3) for use in a telecommunications network, wherein the base station comprises means (14) for performing power control by a method (see figure 4) carried out in a mobile station for controlling transmit power of the base station, the method comprising:

procedures (28) of calculating a signal strength reference value (SIR) for each of a plurality of channels (PDCH1, PDCH2) in use (the signal strength reference being indicated via measure BER or FER of received signals obtained based on a previously calculated value for that channel in a power control loop); and maintaining the calculated signal strength reference value for a channel at or above a predetermined minimum signal strength reference value (SIR_{req}) (see col. 1, line 66 to col. 2, line 55, col. 5, line 61 to col. 6, line 25, col. 7, line 57 to col. 8, line 7).

Further in Dahlman et al, it is inherent that or would be obvious for a person skilled in the art that that the invention would be implemented in such a way that a composite reference signal strength value (SIR) (see Dahlman et al , col. 2, lines 35–40) indicated via the “mean power” of a composite signal for all of said plurality of channels received at the mobile station must be greater than the calculated signal strength reference values for the plurality of channels otherwise the mobile station would never physically obtain the reference signal strength value (SIR) for each of the plurality channel, as desired.

With such the implementation, Dahlman et al teaches procedure of determining a signal strength reference value to be used for all of said plurality of channels in use, as the highest of all of the calculated signal strength reference values, as claimed.

-Claim 17 is rejected with similar reasons set forth for claim 11.

-Regarding to claim 18, as similarly applied to claims 1-3 and 11, set forth above and herein incorporated, discloses a telecommunications network, comprising means (28) for performing power control by a method (see figure 4) carried out in a mobile station for controlling transmit power of a base station, the method comprising:

procedures (28) of calculating a signal strength reference value (SIR) for each of a plurality of channels (PDCH1, PDCH2) in use (the signal strength reference being indicated via measure BER or FER of received signals obtained based on a previously calculated value for that channel in a power control loop); and maintaining the calculated signal strength reference value for a channel at or above a predetermined minimum signal strength reference value (SIR_{req}) (see

col. 1, line 66 to col. 2, line 55, col. 5, line 61 to col. 6, line 25, col. 7, line 57 to col. 8, line 7).

Further in Dahlman et al, it is inherent that or would be obvious for a person skilled in the art that the invention would be implemented in such a way that a composite reference signal strength value (SIR) (see Dahlman et al , col. 2, lines 35–40) indicated via the “mean power” of a composite signal for all of said plurality of channels received at the mobile station must be greater than the calculated signal strength reference values for the plurality of channels otherwise the mobile station would never physically obtain the reference signal strength value (SIR) for each of the plurality channel, as desired.

With such the implementation, Dahlman et al teaches procedure of determining a signal strength reference value to be used for all of said plurality of channels in use, as the highest of all of the calculated signal strength reference values, as claimed.

–Claim 20 is rejected with similar reasons set forth for claim 11.

Allowable Subject Matter

4. Claims 4-10 would be allowable if rewritten to overcome the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

5. Claims 13, 16 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References 6873856, 6622024 and 6285887 are additionally cited because they are pertinent to the claimed method and associated system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanh D. Phu whose telephone number is (571)272-7857. The examiner can normally be reached on M-Th from 7:00-17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-

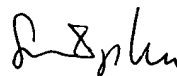
4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SP

Sanh D. Phu
Examiner
Division 2618

12/12/06



SANH D. PHU
PATENT EXAMINER